

REMARKS

The Office Action dated December 15, 2005, has been received and carefully noted. The Applicant respectfully requests reconsideration of the application in view of the preceding amendments and the foregoing remarks.

By this amendment, claims 9-11 are amended. Claims 1-8 have been withdrawn. Support for these claim amendments is found at least in Figures 2-4, and page 15, lines 11-16, page 40, lines 5-9, and page 50, lines 19-23, of the original specification. Claims 9-13 are currently pending in the application and subject to examination. The Applicants submit that no new matter has been added.

Claim Objections

Claims 9-13 are objected to as containing informalities. Claims 9-11 have been amended responsive to this objection. Applicants thus respectfully request withdrawal of the objection to claims 9-13.

Rejection Under 35 U.S.C. § 112

Claims 9-10 and 12 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Claims 9 and 10 have been amended in responsive to this rejection. As such, the Applicants respectfully request withdrawal of the rejection.

Rejection Under 35 U.S.C. § 103

Claims 9-13 are rejected under 35 U.S.C. § 103 as being unpatentable over Hofstetter et al. (U.S. Patent No. 6,136,623, hereinafter "Hofstetter") in combination with Cheung et al. (U.S. Patent No. 6,420,242, hereinafter "Cheung") and Ikeda et al. (U.S.

Patent No. 6,956,322, hereinafter "Ikeda"). To the extent this rejection remains applicable to the claims as amended, the Applicants respectfully traverse the rejection.

Claim 9, as amended, sets forth a method of manufacturing a semiconductor laser device, comprising, among other features, at least a first step of stacking thin films of group-III nitride compound semiconductors having a plurality of waveguides for a plurality of said first laser parts, and forming a first adhesive layer thereon to fabricate a first intermediate body. Applicants respectfully submit that the cited prior art fails to teach or suggest at least this element of amended claim 9.

Hofstetter is cited as teaching "a step of stacking thin films of group III nitride compound semiconductors from the group consisting of Al, Ga, In, and N, on a sapphire substrate as a first step." However, Hofstetter fails to teach or suggest at least the elements of "having a plurality of waveguides for a plurality of said first laser parts," or "forming a first adhesive layer thereon to fabricate a first intermediate body," as set forth in amended claim 9. Nowhere does Hofstetter teach or suggest the desirability of these elements. Further, neither Cheung nor Ikeda cure this deficiency of Hofstetter, nor do they suggest ways of modifying the references to include this feature.

Additionally, amended claim 9 also sets forth "a sixth step of cleaving said third intermediate body after the removal of said sapphire substrate, and dividing the resultant where said second adhesive layer is exposed, thereby fabricating semiconductor laser devices each including a first laser part and a second laser part." The Office Action does not appear to take the position that any of the cited prior art teaches this sixth step. The Office Action admits that Hofstetter fails to teach the fourth and fifth steps of the process, but appears to take the position that Cheung cures these deficiencies. The Office Action

then states, "Neither Hofstetter et al. nor Cheung do not teach transferring the bonded **and cleaved** substrate to the support substrate" (emphasis added). The Office Action then cites Ikeda as teaching "binding the sapphire and GaAs substrate to then transferring the bonded substrate to support substrate '11'." (See Office Action, page 4, first paragraph). However, the sixth step of claim 9 sets forth "**cleaving said third intermediate body** after the removal of said sapphire substrate, and dividing the resultant where said second adhesive layer is exposed, thereby fabricating a plurality of semiconductor laser devices, each including a first laser part and a second laser part" (emphasis added). Neither Hofstetter, Cheung, nor Ikeda, alone or in combination, teach or suggest this feature of amended claim 9, nor does it appear that the Office Action takes the position that any of the cited prior art teaches or suggests this element.

Claim 10 sets forth a method of manufacturing a semiconductor laser device, comprising, among other features, at least a first step of stacking thin films of group-III nitride compound semiconductors having a plurality of waveguides for a plurality of said first laser parts, and forming a first adhesive layer thereon, being patterned into stripe arrays along said waveguides to fabricate a first intermediate body, said first adhesive layer covering said waveguides.

As discussed with respect to claim 9, Applicants take the position that the cited prior art fails to teach or suggest all the elements of amended claim 10. Hofstetter is cited as teaching "a step of stacking thin films of group III nitride compound semiconductors from the group consisting of Al, Ga, In, and N, on a sapphire substrate as a first step." However, as discussed above, neither Hofstetter, Cheung, or Ikeda, alone or in combination, teach "having a plurality of waveguides for a plurality of said first

laser parts,” or, “forming a first adhesive layer thereon, being patterned into stripe arrays along said waveguides to fabricate a first intermediate body,” as set forth in amended claim 10, nor does the cited prior art suggest ways of modifying the references to include these features of amended claim 10.

Further, claim 10, as amended, also sets forth “a sixth step of cleaving said third intermediate body after the removal of said sapphire substrate, and dividing the resultant where said second adhesive layer is exposed, thereby fabricating semiconductor laser devices each including a first laser part and a second laser part.” As discussed above with respect to claim 9, the cited prior art fails to disclose or suggest at least this element of the presently claimed invention, nor does it appear that the Office Action takes the position that any of the cited prior art teaches or suggests this element of amended claim 10.

Claim 11, as amended, sets forth a method of manufacturing a semiconductor laser device, comprising, among other features, at least a first step of stacking thin films of group-III nitride compound semiconductors having a plurality of waveguides for a plurality of said first laser parts, and forming a first adhesive layer thereon to fabricate a first intermediate body.

As discussed above with respect to claim 9, Applicants respectfully submit that the cited prior art fails to teach or suggest all the elements of amended claim 11. Hofstetter is cited as teaching “a step of stacking thin films of group III nitride compound semiconductors from the group consisting of Al, Ga, In, and N, on a sapphire substrate as a first step.” However, as discussed above, neither Hofstetter, Cheung, or Ikeda, alone or in combination, teach “having a plurality of waveguides for a plurality of said first

laser parts,” or “forming a first adhesive layer thereon to fabricate a first intermediate body,” as set forth in amended claim 11, nor does the cited prior art suggest ways of modifying the references to include these features of amended claim 11.

Further, amended claim 11 also sets forth “a sixth step of cleaving said third intermediate body after the removal of said sapphire substrate, and dividing the resultant where said ohmic electrode layer is exposed, thereby fabricating a plurality of semiconductor laser devices each including a first laser part and a second laser part.” As discussed above with respect to claim 9, the cited prior art fails to disclose or suggest at least this element of the presently claimed invention, nor does it appear that the Office Action takes the position that any of the cited prior art teaches or suggests this element of amended claim 11.

To establish *prima facie* obviousness, each feature of a rejected claim must be taught or suggested by the applied art of record. See M.P.E.P. §2143.03 and In re Royka, 490 F.2d 981 (CCPA 1974). As explained above, Hofstetter, Cheung, and Ikeda, alone or in combination, do not teach or suggest at least the features of the claims highlighted above.

Accordingly, for the above provided reasons, Applicants respectfully submit that claims 9, 10, and 11 are not rendered obvious under 35 U.S.C. § 103 by the teachings of Hofstetter, Cheung, and Ikeda, and therefore claims 9, 10, and 11 are allowable.

Furthermore, Applicants respectfully note that claims 12 and 13 depend from claims 9, 10, or 11. Therefore, Applicants respectfully submit that claims 12 and 13, are allowable for at least the same reasons claims 9, 10, and 11 are allowable, as well as for the additional subject matter recited therein.

Under U.S. patent practice, the PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002). The Office Action restates the advantages of the present invention to justify the combination of references. There is, however, nothing in the applied references to evidence the desirability of these advantages in the disclosed structure. Further, no specific motivation is stated by the Office Action for combining Ikeda with Hofstetter and Cheung.

Thus, Applicants respectfully request withdrawal of the rejection.

Double Patenting

Claims 9-13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-21 of copending U.S. Patent

Application No. 10/743,944 (hereinafter the "944 application"). Applicants respectfully traverse the rejection.

The '944 application was filed on December 24, 2003, one day after the filing date of present application. Consequently, the filing of a terminal disclaimer in this application would not shorten the time period that the present application, if issued as a patent, could be enforced. As the present application was the first filed, a double patenting rejection is improper for claims 9-13 of the present application. Therefore, Applicants respectfully request withdrawal of the provisional rejection of claims 9-13 for at least this reason.

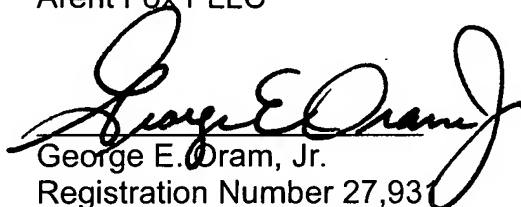
Conclusion

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not considered to be timely filed, an appropriate extension of time is requested. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account Number 01-2300, referencing Docket Number 107156-00217.

Respectfully submitted,

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